

## Claims

- [c1] A method of operating a tire pressure monitoring system for a vehicle having a plurality of tire locations and a memory comprising:  
generating an ignition signal;  
generating a brake condition signal;  
entering a learn mode in response to the ignition signal and the brake condition signal.
- [c2] A method as recited in claim 1 wherein the ignition condition signal transitions from an off state to an on state, further comprises counting the transitions, and entering the learn mode after a predetermined number of transitions.
- [c3] A method as recited in claim 2 wherein counting comprises counting the number of transitions before and after generating the brake condition signal.
- [c4] A method as recited in claim 3 wherein the predetermined number comprises three.
- [c5] A method as recited in claim 3 wherein generating a brake condition signal comprises generating a brake transition signal.
- [c6] A method as recited in claim 1 further comprising generating a first display signal indicative of a first tire location in response to entering the learn mode.
- [c7] A method as recited in claim 6 further comprising activating a timer in response to entering the learn mode.
- [c8] A method as recited in claim 7 further comprising when a first transmitter identification signal is received before a predetermined time counted by the timer, resetting the timer and generating a second display signal indicative of a second tire location.
- [c9] A method as recited in claim 8 further comprising receiving a second transmitter identification signal.
- [c10] A method as recited in claim 9 further comprising associating the first identification signal with a first tire location and a second identification signal

with a second tire location.

- [c11] A method as recited in claim 1 wherein at least one of the first location second location comprises a spare location.
- [c12] A method of operating a tire pressure monitoring system for a vehicle having a plurality of tire locations and a memory comprising:
  - generating an ignition signal;
  - generating a brake condition signal;
  - generating a speed signal;
  - entering a learn mode in response to the ignition signal, the brake condition signal;
  - thereafter, sequentially
  - generating a plurality of display signals indicative of the respective plurality of tire locations;
  - activating a timer; and
  - when the plurality of transmitter identification signals are received before a predetermined time counted by the timer, associating the respective plurality of identification signals with the respective plurality of locations in a memory.
- [c13] A method as recited in claim 12 further comprising generating a status signal indicative of a successful process in response to the step of associating.
- [c14] A method as recited in claim 12 further comprising when during the steps of generating or activating, the speed is greater than a predetermined speed leaving the learn mode;  
 A method as recited in claim 12 further comprising when during the steps of generating or activating, the ignition is off leaving the learn mode.
- [c15] A method as recited in claim 12 wherein at least one of the plurality of locations comprise a spare location.
- [c16] A tire pressure monitoring system for a vehicle comprising:
  - an ignition switch generating an ignition signal;
  - a brake switch generating a brake condition signal;
  - a counter coupled to said ignition switch counting a count of ignition signal

transitions

a plurality of tires having a respective plurality of tire transmitters generating a respective plurality of transmitter identification signals; and  
a controller coupled to said counter , said controller entering a learn mode in response to the count and the brake condition signal.

[c17] A system as recited in claim 17 further comprising a display for signaling a desired action, wherein said controller generates a plurality of display signals on the display indicative of the respective plurality of tire locations; activating the timer; when a the plurality of transmitter identification signals are received before a predetermined time counted by the timer.

[c18] A system as recited in claim 18 further comprising a memory; and associating the respective plurality of identification signals with the respective plurality of locations in a memory.